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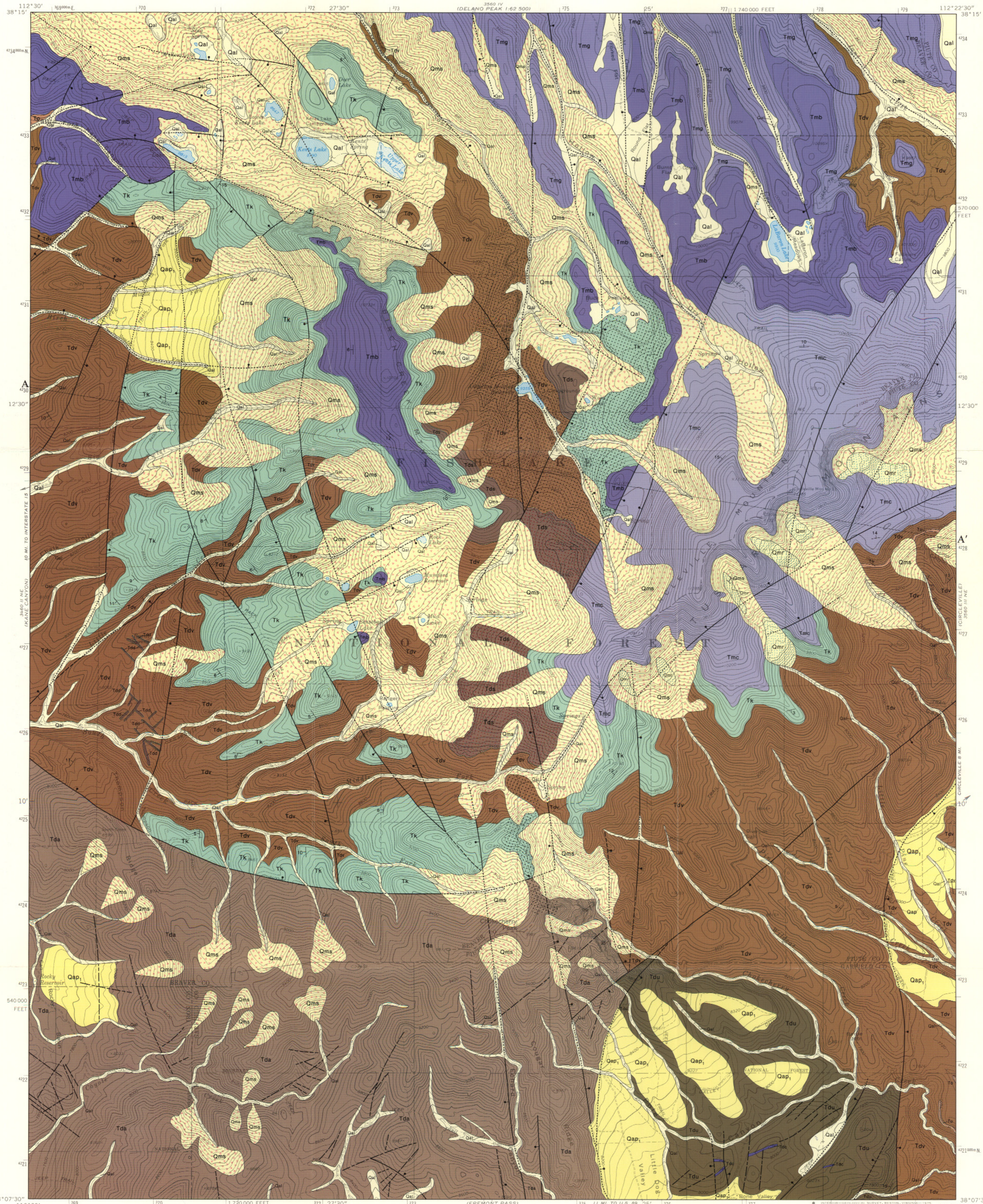
Plate 1
Utah Geological and Mineral Survey Map 80
Geologic Map of Circleville Mtn. Quadrangle



Base map from U.S. Geological Survey Circleville Mtn. Quadrangle, Beaver, Piute, Iron, and Garfield Counties, Utah, 1971.

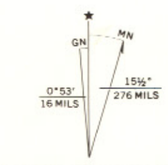
SCALE 1:24 000

1 MILE
1000 0 1000 2000 3000 4000 5000 6000 7000 FEET
1 KILOMETER

CONTOUR INTERVAL 40 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

Field mapped in 1970-71, field checked in 1982-83.

Patricia H. Speranza, and Deborah A. Jenkins, Cartographers



UTM GRID AND 1971 MAGNETIC NORTH DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

GEOLOGIC MAP OF CIRCLEVILLE MOUNTAIN QUADRANGLE BEAVER, PIUTE, IRON AND GARFIELD COUNTIES, UTAH

by
John J. Anderson
U.S. Geological Survey

1986

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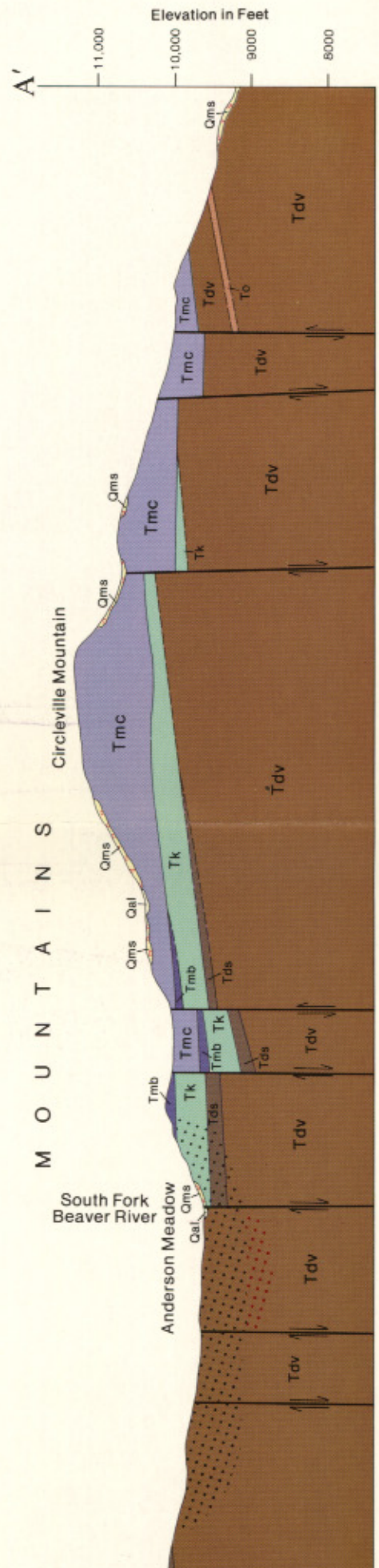
Plate 2
Utah Geological and Mineral Survey Map 80
Geologic Map of Circleville Mtn. Quadrangle

FORMATION		SYMBOL	LITHOLOGY	THICKNESS feet (meters)
Surficial deposits		Qal Qms Qap$_1$ Qmr		0-300 (100)
Mafic gravels of Gunsight Flat		Tmg		0-600 (200)
Mafic lava flows of Circleville Mountain		Tmc Tdc		0-1100 (375)
Mafic lava flows of Birch Creek Mountain		Tmb		0-300 (100)
Lava flows of Kents Lake		Tk		0-800 (250)
Mount Dutton Formation	Sandstone member	Tds		0-500 (150)
	Osiris Tuff	To		0-100 (30)
	Alluvial facies	Tda		1300+ (400+)
	Vent facies	Tdv		3000+ (1000+)
	Dikes	Tdd		
	Undivided	Tdu		



DESCRIPTION OF MAP UNITS

QUATERNARY — PLEISTOCENE AND HOLOCENE

Qal — Alluvium—*Unconsolidated silt, sand, and gravel along active streams and washes.*

Qms — Landslide debris—*disaggregated rock and surficial deposits; locally consists of valley glacier deposits.*

Qap$_1$ — Piedmont slope deposits—*poorly sorted, unconsolidated silt, sand, and gravel on sloping surfaces from deposition (alluvial fans) and erosion (pediments).*

Qmr — Rock glacier gravel—*unconsolidated, angular, poorly sorted cobble- and boulder-sized gravel consisting almost exclusively of Tmc.*

Unconformity

TERTIARY — MIOCENE

Tmg — Mafic gravels of Gunsight Flat—*poorly consolidated conglomerate and fanglomerate derived from Tmc and Tmb.*

Tmc — Mafic lava flows of Circleville Mountain—*resistant, dark-gray to black, vesicular to dense, porphyritic lava flows that resemble plateau basalts.*

Tdc — Dikes of mafic lava flows of Circleville Mountains—*moderately resistant, dark-gray to black, generally dense, porphyritic mafic rock identical in lithology to Tmc.*

Tmb — Mafic lava flows of Birch Creek Mountain—*moderately resistant, dark-gray to black, vesicular to dense olivine basalt or olivine-bearing mafic rock.*

Tk — Lava flows of Kents Lake—*moderately resistant, light- to medium-gray, dense, andesite porphyry.*

To — Osiris tuff—*ledge-forming, reddish-brown to pinkish- or purplish-gray, densely welded, vitric-crystal ash-flow tuff.*

Mount Dutton Formation

TERTIARY — OLIGOCENE AND MIOCENE

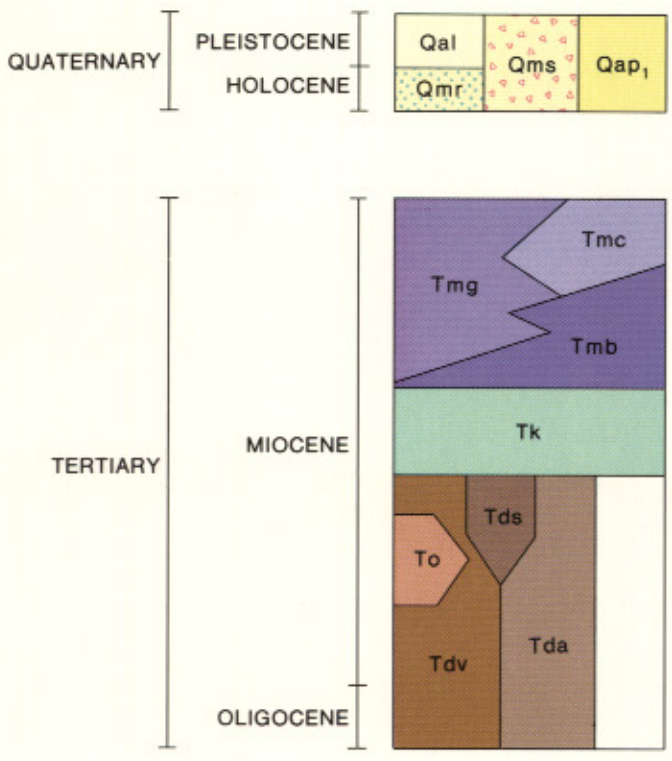
Tds — Sandstone member—*soft, light-gray, yellow or tan, cross-bedded, zeolite-cemented tuffaceous sandstone.*

Tdd — Dikes—*dikes of porphyritic amphibole andesite.*

Tdv — Vent facies—*medium- to dark-gray and gray-brown, dense lava flows and autoclastic flow-breccia.*

Tda — Alluvial facies—*gray and brown volcanic mudflow-breccia, conglomerate, and tuffaceous sandstone.*

Tdu — Undivided—*undifferentiatable vent and alluvial facies.*



CONTACT
Dashed where approximately located

FAULT
Dashed where location inferred; dotted where covered; bar and ball on downthrown side

STRIKE AND DIP OF BEDS

IDENTIFIABLE STRUCTURAL LINEAMENT

ALTERED ROCKS
Hydrothermally altered rocks of the Mount Dutton Formation vent facies

SILICIFIED ROCKS
Selectively and intensively silicific rocks of the sandstone member of the Mount Dutton Formation